

Substitute for form 1449A/PTO				Complete if Known	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> (use as many sheets as necessary)				Application Number	10/781,758
				Filing Date	January 14, 2003
				First Named Inventor	ILAN, Neta et al.
				Group Art Unit	1652
				Examiner Name	
				Attorney Docket Number	
Sheet	1	Of	2		

[illegible]

FOREIGN PATENT DOCUMENTS								
Examiners Initials	Cite No. <sup>1</sup>	Foreign Patent Documents			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD- YYYY	Pages, columns, lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Office <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)				
Examiner Signature						Date Considered		

<sup>1</sup> Unique citation designation number. <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

**DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.**

Please type a plus sign (+) inside this box → ☒

PTO/SB/08A (10-96)

Approved for use through 10/31/99 OMB 0651-0031

Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(use as many sheets as necessary)</i>		Complete if Known	
		Application Number	
		Filing Date	
		First Named Inventor	
		Group Art Unit	
		Examiner Name	
Sheet	2	Of	2
		Attorney Docket Number	
OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
RH		Vlodavsky et al. "Mammalian Heparanase: Gene Cloning, Expression and Function in Tumor Progression and Metastasis", Nature Medicine, 5(7): 793-802, 1999.	
RH		Chang et al. "Differential Ability Of Heparan Sulfate Proteoglycans To Assemble The Fibroblast Growth Factor Receptor Complex In situ", FASEB Journal, 14: 137-144, 2000.	
RH		Ishai-Michaeli et al. "Importance of Size and Sulfation of Heparin in Release of Basic Fibroblast Growth Factor From the Vascular Endothelium and ExtraCellular Matrix", Biochemistry, 31(7): 2080-2088, 1992. Abstract	
RH		Gitay-Goren et al. "The Binding of Vascular Endothelial Growth Factor to Its Receptors Is Dependent on Cell Surface-Associated Heparin-Like Molecules", Journal of Biological Chemistry, 267(9): 6093-6098, 1992.	
RH		Hulett et al. "Cloning of Mammalian Heparanase, an Important Enzyme in Tumor Invasion and Metastasis", Nature Medicine: 5(7): 803-809, 1999.	
RH		Toyoshima et al. "Human Heparanase: Purification, Characterization, Cloning, and Expression", J. of Biolog. Chemistry, 274(34): 24153-24160, 1999	
Examiner Signature	/Richard Hutson/ (08/16/2006)		Date Considered

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup>. Unique citation designation number. <sup>2</sup>. Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231.

DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



PTO/SB/08a (08-03)

Approved for use through 07/31/2006. OMB 0651-0031  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Project 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

**Complete if Known**

Application Number	10/781,758
Filing Date	January 14, 2003
First Named Inventor	ILAN Neta et al
Art Unit	
Examiner Name	
Attorney Docket Number	27525

Sheet 1 of 18

**U.S. PATENT DOCUMENTS**

Examiner Initials*	Cite No. 1	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
RH	1	US-6,177,545	01-13-2001	Pecker et al.	
	2	US-6,348,344	02-19-2002	Ayal-Herskovitz et al	
	3	US-4,946,778	08-8-1990	Ladner et al.	
	4	US-5,997,863	07-7-1999	Zimmermann et al.	
	5	US-6,242,238	05-5-2001	Freeman et al	
	6	US-5,688,679	11-18-1997	Powell	
	7	US-6,387,643	05-14-2002	Heinrikson et al.	
	8	US-6,423,312	07-23-2002	Yacoby-Zeevi	
	9	US-6,531,129	01-1-2003	Pecker et al.	
	10	US-4,455,296	06-19-1984	Hansen et al.	
	11	US-5,571,506	01-1-1996	Regan et al.	
	12	US-5,917,830	06-29-1999	Chen et al.	
	13	US-5,859,660	01-12-1999	Perkins et al.	
	14	US-5,600,366	04-4-1997	Schulman	
	15	US-6,020,931	01-1-2000	Bilbrey et al.	
	16	US-5,968,822	10-19-1999	Pecker et al.	
	17	US-6,153,187	11-28-2000	Yacoby-Zeevi	
	18	US-6,664,105	12-16-2003	Pecker et al.	
	19	US-5,145,679	08-8-1992	Hinson	
	20	US-5,736,137	07-7-1998	Anderson et al.	
	21	US-5,194,596	03-16-1993	Tischer et al.	
	22	US-5,350,836	09-27-1994	Kopchick et al.	
	23	US-6,562,950	05-13-2003	Peretz et al.	
	24	US-6,699,672	02-2-2004	Pecker et al.	
	25	US-5,580,862	03-3-1996	Rosen et al.	
	26	US-5,474,983	12-12-1995	Kuna et al.	
	27	US-2002/0102560	01-1-2002	Pecker et al.	
	28	US-4,859,581	01-1-1989	Nicholson et al.	
	29	US-4,882,318	01-1-1989	Vlodavsky et al.	
	30	US-5,129,877	01-1-1992	Gallo et al.	
	31	US-5,206,223	04-27-1993	Vlodavsky et al	
	32	US-5,332,812	07-26-1994	Nicolson et al.	
	33	US-5,362,641	08-8-1994	Fuks et al.	
	34	US-5,399,351	01-1-1995	Leshchiner et al	
	35	US-5,550,116	01-1-1996	Lormeau et al.	
	36	US-5,667,501	01-1-1997	Fowler et al	
	37	US-5,739,115	01-1-1998	Fugedi et al	

**FOREIGN PATENT DOCUMENTS**

Examiner Initials*	Cite No. 1	Foreign Patent Documents	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T 6
		Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known)				
RH	38	PCT WO 99/57244	11-11-1999	Ben-Artzi et al.		

40	PCT WO 99/11798	03-11-1999	Pecker et al.	
41	PCT WO 88/01280	01-1-1988	Nicolson et al.	
42	PCT WO 95/04158	09-9-1995	Hoogewerf et al.	
43	PCT WO 99/21975	06-6-1999	Freeman et al.	
44	PCT WO 91/19197	12-12-1991	Nicolson et al.	
45	PCT WO 95/04518	02-16-1995	Midha et al.	
46	PCT WO 03/006645 A2	01-23-2003	Bohlen et al.	
47	PCT WO 97/11684	04-4-1997	Bennett et al.	
48	PCT WO 91/02977	07-7-1991	Fuks et al.	
49	PCT WO 97/27327	07-31-1997	Van Ness et al.	
50	PCT WO 00/52149	08-8-2000	Yacobi-Zeevi	
51	PCT WO 00/52178	08-8-2000	Pecker et al.	
Examiner Signature			Date Considered	

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS.

SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450

 5/18/06

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1448A/PTO				Complete if Known	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(use as many sheets as necessary)</i>				Application Number	10/781,758
				Filing Date	January 14, 2003
				First Named Inventor	ILAN Neta et al
				Group Art Unit	
				Examiner Name	
Sheet	2	Of	18	Attorney Docket Number	27525
<b>OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS</b>					
Examiner Initials	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.			T <sup>2</sup>
	52	Wight et al. "The Role of Proteoglycans in Cell Adhesion, Migration and Proliferation", Curr. Opin. Cell. Biology, 4: 793-801, 1992.			
	53	Jackson et al. "Glycosaminoglycans: Molecular Properties, Protein Interactions, and Role in Physiological Processes", Physiological Review, 71(2): 481-539, 1991.			
	54	Durand et al. "Active-Site Motifs of Lysosomal Acid Hydrolases: Invariant Features of Clan GH-A Glycosyl Hydrolases Deduced from Hydrophobic Cluster Analysis", Glycobiology 7(2): 277-284, 1997.			
	55	Korb et al. "Stimulation of Gene Expression by Introns: Conversion of an Inhibitory Intron to a Stimulatory Intron by Alteration of the Splice Donor Sequence", Nucleic Acids Research 21(25): 5901-5908, 1993.			
	56	Fairbanks et al. "Processing of the Human Heparanase Precursor and Evidence that the Active Enzyme is a Heterodimer", Journal of Biol. Chem., 274,(42): 29587-29590, 1999.			
	57	Linhardt et al. "Polysaccharide Lyases", Applied Biochemistry and Biotechnology 12: 135-176, 1986.			
	58	Dempsey et al. "Heparanase, A Potential Regulator of CellMatrix Interactions", TIBS, 25(8):349-351, 2000. P. 350, Col.1, § 1; P.350, Col.3, § 1; Claims: 1-24.			
	59	Niwa et al. "Efficient Selection for High-Expression Transfectants With a Novel Eukaryotic Vector", Gene, 108(2):193-199, 1991.			
	60	Clark "The Mammary Gland as a Bioactor: Expression, Processing, and Production of Recombinant Proteins", J. Mammary Gland Biol. and Neoplasia, 3(3):337-350, 1998.			
	61	Mirault et al. "Transgenic Glutathione Peroxidase Mouse Models for Neuroprotection Studies", Ann NY Acad Sci, 738:104-115, 1994.			
	62	Lampard et al. " Secretion of Foreign Proteins Mediated by Chicken Lysozyme Gene Regulatory Sequences", Biochem Cell Biol., 80(6):777-788, 2002.			
	63	Harvey et al. "Expression of Exogenous Protein in the Egg White of Transgenic Chickens", Nature Biotechnology, 19:396-399, 2002.			
	64	Morrison et al. "Sequences in Antibody Molecules Important for Receptor-Mediated Transport Into the Chicken Egg Yolk", Mol Immunol., 38(8): 619-625, 2002.			
	65	Clark et al. "Pharmaceuticals from Transgenic Livestock", TIBTECH, 5: 20-24, 1987.			
	66	Richards et al. "Construction and Preliminary Characterization of the Rat Casein and Alpha-Lactalbumin Cdna Clones", J. Biol. Chem., 256(1): 526-32, 1981.			
	67	Campbell et al. "Comparison of the Whey Acidic Protein Genes of the Rat and Mouse", Nucleic Acids Res., 12(22): 8685-8697, 1984.			
	68	Gorodetsky et al. "Isolation and Characterization of the Bos Taurus $\beta$ -Casein Gene", Gene, 66: 87-96, 1988.			
	69	Alexander et al. "Complete Sequence of the Bovine $\beta$ -Lactoglobulin cDNA", Nucleic Acids Research, 17(16): 6739-6744, 1989.			
	70	Benezra et al. "Thrombin Enhances the Degradation of Heparan Sulfate in the Extracellular Matrix by Tumor Cell Heparanase." Exptl. Cell. Res. (1992) vol. 201:208-215			
	71	Harlow et al. "Antibodies" A Laboratory Manual, eds. Harlow et al. 471-510.			
	72	Murray et al. "The Extracellular Matrix", found in Harper's Biochemistry, 24th Ed., McGraw-Hill Professional, Chap. 57, pp 667-685, 1998.			
	73	Selvan et al. "Heparan Sulfate in Immune Responses", An. NY Acad. Sci., 797: 127-			

		139, 1996.	
	74	Prockop "Marrow Stromal Cells as Stem Cells for Nonhematopoietic Tissues", Science 276: 71-74, 1997.	
	75	Krivit et al. "Microglia: The Effector cell for reconstitution of the Central Nervous System Following Bone Marrow Transplantation for Lysosomal and Peroxisomal Storage diseases", Cell Transplant, 4(4): 385-392, 1995. (Abstract)	
	76	Robey et al. "Biochemical Characterization of Marrow Stromal Fibroblasts", 6th Int'l. conf. On Molec. Biol. And Pathology of Matrix, Session IV.	
	77	Lazarus et al. "Ex Vivo Expansion and subsequent Infusion of Human Bone Marrow-Derived Stromal Progenitor Cells (Mesenchymal Progenitor cells): Implications for therapeutic Use", Bone Marrow Transplantation, 16:557-564, 1995.	
	78	Pomahac et al. "Tissue Engineering of Skin" Crit Rev Oral Biol Med, 9(3):333-344, 1998. (abstract)	
	79	Benathan et al. "Living epidermal and Dermal Substitutes for Treatment of Severely burned Patients", Rev Med Suisse Romande, 118(2): 149-153, 1998. (Abstract-art in French)	
	80	Wang et al. "Basic Fibroblast Growth Factor Enhances Bone-Graft Incorporation: Dose and Time Dependence in Rats", J. Orthop. Res., 14(2): 316-323, 1996. Abstract.	
	81	Duffy et al. "Maximizing Flap Survival in a Prefabrication Model Using Exogenous and Endogenous bFGF: A New Approach", Microsurgery, 17(4): 176-179, 1996. Abstract.	
	82	Garner "Epidermal Regulation of Dermal Fibroblast Activity", Plast. Reconstr. Surg., 102(1):135-139, 1998. Abstract.	
	83	Raghuath et al. "Cultured Epithelial Autografts: Diving from Surgery into Matrix Biology", Pediatr. Surg. Int., 12(7): 478-483, 1997. Abstract.	
	84	Myers et al. "Transplantation of Keratinocytes in the Treatment of Wounds", American J. Surg., 170(1):75-83, 1995. Abstract.	
	85	Kawaja et al. "Employment of Fibroblasts for Gene Transfer: Applications for Grafting into the Central Nervous System", Genet Eng (NY), 13: 205-220, 1991. Abstract.	
	86	Maillard et al. "Pre-Treatment with Elastase Improves the Efficiency of Percutaneous Adenovirus-Mediated Gene Transfer to the Arterial Media", Gene Therapy, 5: 1023-1030, 1998.	
	87	Wang "Basic Fibroblast Growth Factor for Stimulation of Bone Formation in Osteoinductive or Conductive Implants", Acta Orthop Scand Suppl, 269: 1-33, 1996 (abstract)	
	88	Wang "Basic Fibroblast Growth Factor Infused at Different Times During Bone Graft Incorporation. Titanium Chamber Study in Rats", Acta Orthop Scand, 67(3): 229-236, 1996. Abstract.	
	89	Inui et al. "Local Application of Basic Fibroblast Growth Factor Minipellet Induces the Healing of Segmental Bony Defects in Rabbits".	
	90	Tabata et al. "Bone Regeneration by Basic Fibroblast Growth Factor Complexed with Biodegradable Hydrogels", Biomaterials, 19(7-9): 807-815, 1998. Abstract.	
	91	Aspenberg et al. "Stimulates Bone Formation. Bone Induction Studied in Rats", Acta Orthop. Scand., 60(4): 473-476, 1989. Abstract.	
	92	Aspenberg et al. "Dose-Dependent Stimulation of Bone Induction by Basic Fibroblast Growth Factor in Rats", Acta Orthop. Scand., 62(5): 481-484, 1991. Abstract.	
	93	Matoba et al. "Evaluation of Omental Implantation for Perforated Gastric Ulcer Therapy: Findings in a Rat Model", J. Gastroenterol, 31(6): 777-784, 1996. Abstract.	
	94	Chleboun et al. "The Development and Enhancement of the Collateral Circulation in an Animal Model of Lower Limb Ischaemia", Aust. NZ Surg., 64(3): 202-207, 1994. Abstract.	
	95	Aplin "Adhesion Molecules in Implantation", Rev Reprod, 2(2): 84-93, 1997.	
	96	Lessey et al. "Paracrine Signaling in the Endometrium: Integrins and the Establishment of Uterine Receptivity", J. Reprod. Immunol., 39(1-2): 105-116, 1998. Abstract.	
	97	Burrows et al. "Trophoblast Migration During Human Placental Implantation", Hum. Reprod. Update, 2(4): 307-321, 1996.	
	98	Bischof et al. "The Regulation of Endometrial and Trophoblastic Metalloproteinases During Blastocyst Implantation", Contracept Fertil Sex, (art in French) 22(1): 48-51, 1994. Abstract.	

99	Smith et al. "Expression of Heparan Sulfate Protoglycan (perlecan) in the Mouse Blastocyst is Regulated during Normal and Delayed Implantation", Dev. Biol., 184(1): 38-47, 1997. Abstract.	
100	Abrahamsohn et al. "Implantation and Decidualization in Rodents", J. Exp. Zool., 266(6): 603-628, 1993. Abstract.	
101	Goshen et al. "Purification and Characterization of Placental Heparanase and Its Expression by Cultured Cytotrophoblasts", Molecular Human Reproduction, 2(9): 679-684, 1996.	
102	Yoshida "Effects of Basic Fibroblast Growth Factor on the Development of Mouse Preimplantation Embryos", Nippon Sanka Fujinka Gakkai Zasshi, 48(3): 170-176, 1996. Abstract.	
103	Watson et al. "A Growth Factor Phenotype Map for Ovine Preimplantation Development", Biol. Reprod., 50(4): 725-733, 1994. Abstract.	
104	Carlone et al. "Embryonic Modulation of Basic Fibroblast Growth Factor in the Rat Uterus", Biol. Reprod., 49(4): 653-665, 1993. Abstract.	
105	Wordinger et al. "The Immunolocalization of Basic Fibroblast Growth Factor in the Mouse Uterus During the Initial Stages of Embryo Implantation" Growth Factors, 11(3): 175-186, 1994. Abstract.	
106	Schultz et al. "Growth Factors in Preimplantation Mammalian Embryos", Oxf. Rev. Reprod. Biol., 15:43-81, 1993. Abstract.	
107	Freeman et al. "Human Platelet Heparanase: Purification, Characterization and Catalytic Activity", Biochem. J., 330: 1341-1350, 1998. Claims: P,X: 1-47, 51-58 / Y,P: 48-50.	
108	Esko et al. "Tumor Formation Dependent on Proeoglycans Biosynthesis", Science, 241(4869): 1092-1096, 1988. Abstract.	
109	Richardson et al. "Regulation of Basic Fibroblast Growth Factor Binding and Activity by Cell Density and Heparan Sulfate", J. Biological Chemistry, 274(19): 13534-13540, 1990.	
110	Hayward et al. "Cellular Mechanisms of Heparinase III Protection in Rat Traumatic Shock", American Journal of Physiology 275:H23-H30, 1998.	
111	Sasisekharan et al. "Heparinase Inhibits Neovascularization", Proc. Natl. Acad.Sci., 91:1524-1528, 1994.	
112	Whitelock et al. "The Degradation of Human Endothelial Cell-Derived Perlecan and Release of Bound Basic Fibroblast Growth Factor by Stromelysin, Collagenase, Plasmin, and Heparanases", Journal of Biological Chemistry, 271(17):10079-10086, 1996.	
113	Ishai-Michaeli et al. "Heparanase Activity Expressed by Platelets, Neutrophils, and Lymphoma Cells Releases Active Fibroblast Growth Factor From Extracellular Matrix", Cell Regulation, 1: 833-842, 1990.	
114	Godder et al. "Heparanase Activity in Cultured Endothelial Cells", Journal of Cellular Physiology, 148: 274-280, 1991.	
115	Kato et al. "Physiological Degradation Converts the Soluble Syndecan-1 Ectodomain from an Inhibitor to a Potent Activator of FGF-2", Nature Medicine, 4(6):691-697, 1998.	
116	Jin et al. "Immunohistochemical Localization of Heparanase in Mouse and Human Melanomas", Int. J. Cancer. 45: 1088-1095, 1990.	
117	Hoogewerf et al. "CXC Chemokines Connective Tissue Activating Peptide-III and Neutrophil Activating Peptide-2 Are Heparin/Heparan Sulfate-Degrading Enzymes", J. Biol. Chem., 270(7):3268-3277, 1995.	
118	Oldberg et al. "Characterization of a Platelet Endoglycosidase Degrading Heparin-Like Polysaccharides", Biochemistry 19: 5755-5762, 1980.	
119	Okamoto et al. "Highly Specific and Sensitive Detection of Malignancy in Urine Samples from Patients with Urothelial Cancer by CD44v8-10/CD44v10 Competitive RT-PCR", Int. J. Cancer, 79(6): 560-564, 1998. Abstract.	
120	Kang et al. "Prolactin-Inducible Enhancer Activity of the First Intron of the Bovine $\beta$ -Casein Gene", Mol Cells, 8(3):259-265, 1998. Abstract.	
121	Gottschalk et al. "Somatic Gene Therapy. Present Situation and Future Perspective", Arzneimittelforschung, 48(11):1111-1120, 1998. Abstract.	
122	Guriec et al. "CD44 Isoforms with Exon v6 and Metastasis of Primary N0M0 Breast Carcinomas", Breast Cancer Res. Treat., 44(3):261-268, 1997. Abstract.	
123	Hida et al. "Antisense E1AF Transfection Restrains Oral Cancer Invasion by Reducing Matrix Metalloproteinase Activities", Am. J. Pathol., 50(6): 2125-2132,	

		1997. Abstract.	
	125	Faber-Elman et al. "Involvement of Wound-Associated Factors in Rat Brain Astrocyte Migratory Response to Axonal Injury: In Vitro Simulation", J. Clin. Invest., 97(1):162-171, 1996.	
	126	Zheng et al. "Increment of hFIX Expression with Endogenous Intron 1 in vitro", Cell Res, 7(1):21-29, 1997 (abstract)	
	127	Welch et al. "Expression of Ribozymes in Gene Transfer Systems to Modulate Target RNA Levels", Curr Opin. Biotechnol., 9(5):486-496, 1998. Abstract.	
	128	Gewirtz et al. "Facilitating Oligonucleotide Delivery: Helping Antisense Deliver on its Promise", Proc. Natl. Acad. Sci. USA, vol. 93: 3161-3163, April 1996.	
	129	Green et al. "Antisense Oligonucleotides: An Evolving Technology for the Modulation of Gene Expression in Human Disease", Journal of American Cell Surgery, 191(1): 93-105, 2000.	
	130	Agrawal "Antisense Oligonucleotides: Towards Clinical Trials", Reviews: 376-387.	
	131	Rajur et al. "Covalent Protein-Oligonucleotide Conjugates for Efficient Delivery of Antisense Molecules". Bioconjugate Chem., 8, 935-940, 1997.	
	132	Luft "Making sense out of Antisense Oligodeoxynucleotide Delivery: Getting there is Half the Fun". J. Mol. Med, 75-76. 1998.	
	133	Kronenwett et al. "Oligodeoxyribonucleotide Uptake in Primary Human Hematopoietic Cells Is Enhanced by Cationic Lipids and Depends on the Hematopoietic Cell Subset". Blood, 91(3): 852-862, 1998.	
	134	Flanagan et al. "Potent and Selective Gene Inhibition Using Antisense Oligodeoxynucleotides". Molecular and Cellular Biochemistry, 172: 213-225, 1997.	
	135	Motokuni et al. "In Vivo Transfer Efficiency of Antisense Oligonucleotides into the Myocardium Using HVJ-Liposome Method", Biochemical and Biophysical Research Communications 231: 540-545, 1997.	
	136	Jayaraman et al. "Rational Selection and Quantitative Evaluation of Antisense Oligonucleotides", Biochimica et Biophysica Acta 1520: 105-114, 2001.	
	137	Walton et al. "Prediction of Antisense Oligonucleotide Binding Affinity to a Structured RNA Target". Biotechnology and Bioengineering, 65(1): 1-9, 1999.	
	138	Uno et al. "Antisense-Mediated Suppression of Human Heparanase Gene Expression Inhibits Pleural Dissemination of Human Cancer Cells", Cancer Research 61(21), 7855-7860, 2001.	
	139	Clancy "Handbook of Microbiology", Vol.1: 239-242, 1974.	
	140	Silver et al. "Pseudomonas: Biotransformations, Pathogenesis, and Evolving Biotechnology", Chapters 2-3, 1990. American Society for Microbiology.	
	141	Wang et al. "Isolation and Characterization of Pseudomonas Aeruginosa Genes Inducible by Respiratory Mucus Derived from Cystic Fibrosis Patients", Mol. Microbiol. 22(5): 1005-1012, 1996. [Abstract]	
	142	Moss et al. "Reduced IL-10 Secretion by CD4+ T Lymphocytes Expressing Mutant Cystic Fibrosis Transmembrane Conductance Regulator (CFTR)", Clin Exp. Immunol. 106(2): 374-399, 1996. [Abstract]	
	143	Davies et al. "Regulation of the Alginate Biosynthesis Gene algC in Pseudomonas Aeruginosa During Biofilm Development in Continuous Culture", Appl. Environ. Microbiol. 61(3): 860-867, 1995. [Abstract]	
	144	Azghani et al. "A Beta-linked Mannan Inhibits Adherence of Pseudomonas Aeruginosa to Human Lung Epithelial Cells", Glycobiology 5(1): 39-44, 1995. [Abstract]	
	145	Ofek et al. "Bacterial Adhesion to Cells and Tissues", Chapman and Hall, New York, 1994, pp. 114-118, 148-153, 418-423, 420-423.	
	146	Davies et al. "The Involvement of Cell-to-Cell Signals in the Development of a Bacterial Biofilm", Science 280: 295-298, 1998.	
	147	Ghani et al. "Ceftazidime, Gentamicin, and Rifampicin, in Combination, Kill Biofilms of Mucoid Pseudomonas Aeruginosa", Can. J. Microbiol. 43(11): 999-1004, 1997. [Abstract]	
	148	Stickler et al. "An Assessment of the Ability of a Silver-Releasing Device to Prevent Bacterial Contamination of Urethral Catheter Drainage Systems", British J. Urology 78: 579-588, 1996.	
	149	Potera "Bacteria in Biofilms Exchange Developmental Signals", ASM News 64(6): 321-322.	
	150	Gabriel et al. "In Vitro Adherence of Pseudomonas Aeruginosa to Four Intraocular Lenses", J. Cataract Refract. Surg. 24: 124-129, 1998.	



151	Pier "Rationale for Development of Immunotherapies that Target Mucoïd Pseudomonas Aeruginosa Infection in Cystic Fibrosis Patients", Behring Inst. Mitt. 98: 350-360, 1997. [Abstract]	
152	Goldberg et al. "Biologic Activities of Antibodies to the Neutral-Polysaccharide Component of the Pseudomonas Aeruginosa Lipopolysaccharide are Blocked by O Side Chains and Mucoïd Exopolysaccharide (Alginate)", Infect. Immun. 63(1): 21-26. [Abstract]	
153	Meluleni et al. "Mucoïd Pseudomonas Aeruginosa Growing in a Biofilm in vitro are Killed by Opsonic Antibodies to the Mucoïd Exopolysaccharide Capsule but not by Antibodies Produced During Chronic Lung Infection in Cystic Fibrosis Patients", J. Immun. 155(4): 2029-2038, 1995. [Abstract]	
154	Philippon et al. "Virulence Factors (Aerobactin and Mucoïd Phenotype) in Klebsiella Pneumoniae and Escherichia Coli Blood Culture Isolates", FEMS Microbiol. Lett. 130(1): 51-57, 1995. [Abstract]	
155	Pier et al. "How Mutant CFTR May Contribute to Pseudomonas Aeruginosa Infection in Cystic Fibrosis", Am. J. Respir. Crit. Care Med. 154(4): S175-S182, 1996. [Abstract]	
156	Pier et al. "Cystic Fibrosis Transmembrane Conductance Regulator Is An Epithelial Cell Receptor for Clearance of Pseudomonas Aeruginosa From the Lung", Proc. Natl. Acad. Sci. USA, 94(22): 12088-12093, 1997.	
157	Boucher et al. "Mucoïd Pseudomonas Aeruginosa in Cystic Fibrosis: Characterization of Muc Mutations in Clinical Isolates and Analysis of Clearance in a Mouse Model of Respiratory Infection", Infect. Immun. 65(9): 3838-3846, Sep. 1997. [Abstract]	
158	Boucher et al. "Two Distinct Loci Affecting Conversion to Mucoïd Pseudomonas Aeruginosa in Cystic Fibrosis Encode Homologs of the Serine Protease HtrA", J. Bacteriol. 178(2): 511-523, 1996. [Abstract]	
159	Yu et al. "Microbial Pathogens in Cystic Fibrosis: Pulmonary Clearance of Mucoïd Pseudomonas Aeruginosa and Inflammation in a Mouse Model of Repeated Respiratory Challenge", Infection and Immunity 66(1): 280-288, 1998.	
160	Van Heeckeren et al. "Excessive Inflammatory Response of Cystic Fibrosis Mice to Bronchopulmonary Infection with Pseudomonas Aeruginosa", J. Clin. Invest. 100(11): 2810-2815, 1997.	
161	Mrsny et al. "Addition of a Bacterial Alginate Lyase to Purulent CF Sputum in vitro can Result in the Disruption of Alginate and Modification of Sputum Viscoelasticity", Pul. Pharmacol. 7(6): 357-366, 1994. [Abstract]	
162	Wiils et al. "Short-Term Recombinant Human Dnase in Bronchiectasis. Effect on Clinical State and in vitro Sputum Transportability". [Abstract]	
163	Cai et al. "Comparison of Sputum Processing Techniques in Cystic Fibrosis", Pediatr. Pulmonol. 22(6): 402-407, 1996. [Abstract]	
164	Randall et al. "Distribution of DNA and Alginate in Purulent Cystic Fibrosis Sputum: Implications to Pulmonary Targeting Strategies", J. Drug. Therapy 4(4): 233-243, 1996.	
165	Hatch et al. "Alginate Lyase Promotes Diffusion of Aminoglycosides Through the Extracellular polysaccharide of Mucoïd Pseudomonas Aeruginosa", Antimicrob. Agents. Chemother. 42(4): 974-977, 1998. [Abstract]	
166	Speert et al. "Modulation of Macrophage Function for Defense of the Lung against Pseudomonas Aeruginosa", Behring Inst. Mitt. 98: 274-282, 1997. [Abstract]	
167	Ying et al. "Alginate, the slime Exopolysaccharide of Pseudomonas Aeruginosa, Binds Human Leukocyte Elastase, Retards Inhibition by Alpha 1-proteinase Inhibitor, and Accelerates Inhibition by Secretory Leukoprotease Inhibitor", Am. J. Cell. Moll. Biol. 15(2): 283-291, 1996. [Abstract]	
168	Johansen et al. "Chronic Pseudomonas Aeruginosa Pneumonia: A new Prophylactic Principle", Behring Inst. Mitt. 90: 269-273, 1997. [Abstract]	
169	Pina et al. "The Role of Fluoroquinolones in the Promotion of Alginate Synthesis and Antibiotic Resistance in Pseudomonas Aeruginosa", Curr. Microbiol. 35(2): 103-108, 1997. [Abstract]	
170	Spencer "Invasive Streptococci", Eur. J. Clin. Microbiol. Infect. Dis., 14 Suppl. 1: S26-S32, 1995. [Abstract]	
171	Mengistu et al. "Continuous Culture Studies on the Synthesis of Capsular Polysaccharide by Klebsiella Pneumoniae K1", J. Appl. Bacteriol. 76(5): 424-430, 1994. [Abstract]	

172	Hsueh et al. "Invasive Streptococci Pneumoniae Infection Associated with Rapidly Fatal Outcome in Taiwan", J. Formos Med. Assoc. 95(5): 364-371, 1996. [Abstract]
173	Moses et al. "Relative Contributions of Hyaluronic Capsule and M Protein to Virulence in a Mucoïd Strain of the Group A Streptococcus", Infect. Immun. 65(1): 64-71, 1997. [Abstract]
174	Scott et al. "Visualization of an Extracellular Mucoïd Layer of Treponema Denticola ATCC 35405 and Surface Sugar Lectin Analysis of Some Treponema Species", Oral Microbiol. Immunol. 12(2): 121-125, 1997. [Abstract]
175	Nilsson et al. "The Role of Staphylococcal Polysaccharide Microcapsule Expression in Septicemia and Septic Arthritis", Infect. Immun. 65(10): 4216-21, 1997. [Abstract]
176	Wessels et al. "Effects on Virulence of Mutations in a Locus Essential for Hyaluronic Acid Capsule Expression in Group A Streptococci", Infect. Immun. 62(2): 433-441, 1994. [Abstract]
177	Farndale et al. "A Direct Spectrophotometric Microassay for Sulfated Glycosaminoglycans in Cartilage Cultures", Connective Tissue Research 9: 247-248, 1982.
178	Pasquier et al. "Implication of Neutral Polysaccharides Associated to Alginate in Inhibition of Murine Macrophage Response to Pseudomonas Aeruginosa", FEMS Microbiol. Lett. 147(2): 195-202, Feb. 1997. Abstract.
179	Marty et al. "Influence of Nutrient Media on the Chemical Composition of the Exopolysaccharide from Mucoïd and non-Mucoïd Pseudomonas Aeruginosa", FEMS Microbiol. Letters, 77(1-3): 35-44, Nov. 1992. Abstract.
180	Jorba et al. ["Variations in the P. Aeruginosa Polysaccharide Synthesis Conditioned by Aminosugars"] (author's translation), Rev. Esp. Fisiol. 36(2): 155-161, 1980. Abstract.
181	Ramos et al. "Relationship Between Glycolysis and Exopolysaccharide Biosynthesis in Lactococcus Lactis", Appl. Environ. Microbiol. 67(1): 33-41, 2001. [Abstract]
182	Bhaskar et al. "Dysregulation of Proteoglycan Production by Intrahepatic Biliary Epithelial Cells Bearing Defective (delta-f508) Cystic Fibrosis Transmembrane Conductance Regulator", Hepatology 27(1): 7-14, Jan. 1998. [Abstract]
183	Vogel et al. "Production of Proteoglycans by Human Lung Fibroblasts (IMR-90) maintained in a Low Concentration of Serum", Biochem J. 207(3): 369-379. Abstract.
184	Hill et al. "Organ-Specific Over-Sulfation of Glycosaminoglycans and Altered Extracellular Matrix in A Mouse Model of Cystic Fibrosis", Biochem. Mol. Med., 62(1): 113-122, 1997. Abstract.
185	Welch et al. "Complex Saccharide Metabolism in Cystic Fibrosis Fibroblasts", Pediatr. Research, 9(9): 698-702, 1975.
186	Rahmoune et al. "Chondroitin Sulfate in Sputum From Patients With Cystic Fibrosis and Chronic Bronchitis", Am. J. Resp. Cell & Mol. Biol., 5(4): 315-320, 1991. Abstract.
187	Beuth et al. "Lectin-Mediated Bacterial Adhesion to Human Tissue", Eur. J. Clin. Microbiol. 6(5): 591-593, 1987. Abstract.
188	Allison et al. "Polysaccharide Production in Pseudomonas Cepacia", J. Basic. Microbiol 34(1): 3-10, 1994. Abstract.
189	Albus et al. "Staphylococcus Aureus Capsular Types and Antibody Response to Lung Infection in Patients with Cystic Fibrosis", J. Clin. Microbiol. 26(12): 2505-2509, 1988. Abstract.
190	Macone et al. "Mucoïd Escherichia coli in Cystic Fibrosis", The New England Journal of Medicine 304(24): 1445-1449, June 11, 1981. Abstract.
191	Tatnell et al. "Characterisation of Alginates from Mucoïd Strains of Pseudomonas Aeruginosa", Biochemical Society Transactions 24: 404S, 1996.
192	Tatnell et al. "Chemical Analysis of Alginates from Mucoïd Strains of Pseudomonas Aeruginosa", Biochemical Society Transactions 22: 310S, 1994.
193	Tatnell et al. "Colonisation of Cystic Fibrosis Patients by non-Mucoïd Pseudomonas Aeruginosa - Characterisation of the Alginate from Mucoïd Variants", Biochemical Society Transactions 24: 406S, 1996.
194	Drigues et al. "Comparative Studies of Lipopolysaccharide and Exopolysaccharide from a Virulent Strain of Pseudomonas Solanacearum and From Three Avirulent Mutants", Journal of Bacteriology 162(2): 504-509, 1985. Abstract.
195	Sutherland "Structure-Function Relationships in Microbial Exopolysaccharides",

		Biotech. Adv. 12: 393-448, 1994.	
	196	Anatolii "Hyaluronic Capsule as one of the Factors of Hemolytic Streptococcus Pathogenicity", Chem. Abstracts 86(17): 339, Abstr. 118714 citing Zh. Mikrobiol. Epidemiol. Immunobiol. 2: 22-27, 1977.	
	197	Campbell "Monoclonal Antibody Technology", Laboratory Techniques in Biochem. & Molecular Biol., 13: 1-32, 1984.	
	198	Campbell "Monoclonal Antibody Technology". Elsevier Science Publishers B.V., Inc., N.Y.: 1-33, 1984.	
	199	Gospodarowicz et al. "Permissive Effect of the ExtraCellular Matrix on Cell Proliferation In Vitro", Proc. Natl. Acad. Sci. USA., 77(7): 4094-4098, 1980.	
	200	Li et al. "Immunohistochemical Localization of Heparanase in Mouse and Human Melanomas", Int. J. Cancer 45: 1088-1095, 1990.	
	201	Graham et al. "Comparison of the Heparanase Enzymes From Mouse Melanoma Cells, Mouse Macrophages, and Human Platelets", Biochem. and Mol. Biol. Int., 39(3): 563-571, 1996.	
	202	Kosir et al. Abstract 3378, Cancer Res., 37: 495, 1996.	
	203	Yelton et al. "Monoclonal Antibodies: A Powerful New Tool in Biology and Medicine", Annu. Rev. Biochem., 50: 657-680, 1981.	
	204	Friedman et al. "Regulated Expression of Homeobox Genes MSX-1 and MSX-2 in Mouse Mammary Gland Development Suggests A Role in Hormone Action and Epithelial-Stromal Interactions", Devel. Biol., 177: 347-355, 1996.	
	205	Soule et al. "Isolation and Characterization of A Spontaneously Immortalized Human Breast Epithelial Cell Line, MCF-10", Cancer Res., 50: 6075-6086, 1990.	
	206	Miller et al. "Xenograft Model of Progressive Human Proliferative Breast Disease", J. Nat. Cancer Inst., 85: 1725-1732, 1993.	
	207	Nakajima et al. "Heparan Sulfate Degradation: Relation to Tumor Invasion and Metastatic Properties of Mouse B16 Melanoma Sublines", Science, 220: 611-613, 1983.	
	208	Kosir et al. "Early Human Breast Carcinoma Cells Produce Extra Cellular Heparanase", Molecular Biology/Biochemistry. Proceedings of the American Association for Cancer Research, 37: 495, 1996.	
	209	Laskov et al. "Production of Heparanase by Normal and Neoplastic Murine - B- Lymphocytes", International Journal of Cancer 47(1): 92-98, Jan. 1991.	
	210	Cordon-Cardo et al. "Expression of Basic Fibroblast Growth Factor in Normal Human Tissue", Laboratory Investigation, 63(6): 832-840, 1990.	
	211	Hillier et al. "The WashU-Merck EST Project", No. N30824, Database GenBank on STN, US National Library of Medicine (Bethesda MD), 1996. Claims: 9, 10.	
	212	Hillier et al. "The WashU-Merck EST Project", No. N30845, Database GenBank on STN, US National Library of Medicine (Bethesda MD), 1996. Claims: 9, 10.	
	213	??? "Current Protocols in Immunology". Greene Publishing Associates and Wiley-Interscience, New York: 2.1.1-2.1.2, 1991.	
	214	Konstan et al. "Current Understanding of the Inflammatory Process in Cystic Fibrosis", Pediatric Pulmonology, 24: 137-142, 1997.	
	215	Dasgupta et al. "Reduction in Viscoelasticity in Cystic Fibrosis Sputum In Vitro Using Combined Treatment With Nacystelyn and rDNase", Pediatric Pulmonology, 22: 161-166, 1996.	
	216	Crystal "Gene Therapy Strategies for Pulmonary Disease", Am. J. Medicine, 92 (Suppl.64): 6A-44S - 6A-52S, 1992.	
	217	Lieberman "The Appropriate Use of Mucolytic Agents", Am. J. Medicine, 49(1): 1-4, 1970.	
	218	Boat et al. "Biochemistry of Airway Mucus Secretions", Fed. Proc., 39(13): 3067-3074, 1980. Abstract.	
	219	Mohapatra et al. "Alteration of Sulfation of Glycoconjugates, But Not Sulfate Transport and Intracellular Inorganic Sulfate Content in Cystic Fibrosis Airway Epithelial Cells", Pediatr. Res., 38(1): 42-48, 1995. Abstract.	
	220	Cheng et al. "Increased Sulfation of Glycoconjugates NY Cultured Nasal Epithelial Cells From Patients With Cystic Fibrosis", J. Clin. Invest., 84(1): 68-72, 1989. Abstract.	
	221	Boat et al. "Epithelial Cell Dysfunction in Cystic Fibrosis: Implications for Airways Disease", Acta Paediatr. Scand. Suppl., 363: 25-29, 1989.	
	222	Schwartz et al. "CpG Motifs in Bacterial DNA Cause Inflammation in the Lower Respiratory Tract", J. Clin. Invest., 100(1): 68-73, 1997. Abstract.	

223	Chase et al. "Respiratory Mucous Secretions in Patients With Cystic Fibrosis: Relationship Between Levels of Highly Sulfated Mucin Component and Severity of the Disease", <i>Clinica Chimica Acta</i> , 132: 143-155, 1983.	
224	Allen "Opportunities for the Use Aerosolized $\alpha 1$ - Antitrypsin for the Treatment of Cystic Fibrosis", <i>Chest</i> , 110: 256S-260S, 1996.	
225	Schwab et al. "Increased Adherence of Staphylococcus Aureus From Cystic Fibrosis Lungs to Airway Epithelial Cells", <i>Am. Rev. Respir.</i> , 148(2): 365-369, 1993. Abstract.	
226	Barghouthi et al. "Nonopsonic Phagocytosis of Pseudomonas Aeruginosa Requires Facilitated Transport of D-Glucose by Macrophages", <i>J. Immunol.</i> , 154(7): 3420-3428, 1995. Abstract.	
227	Moser et al. "Chronic Pseudomonas Aeruginosa Lung Infection Is More Severe in Th2 Responding BALB/c Mice Compared to Th1 Responding C3H/HeN Mice", <i>APMIS</i> , 105(11): 838-842, 1997. Abstract.	
228	Cowley et al. "Mucociliary Clearance in Cystic Fibrosis Knockout Mice Infected With Pseudomonas Aeruginosa", <i>Eur. Respir.</i> , 10(10): 2312-2318, 1997. Abstract.	
229	Zahm et al. "Early Alterations in Airway Mucociliary Clearance and Inflammation of the Lamina Propria in CF mice", <i>Am. J. Physiol.</i> 272(3 Pt 1): C853-C859, 1997. [Abstract]	
230	Thompson et al. "Identification of Chondroitin Sulfate E in Human Lung Mast Cells", <i>J. Immunol.</i> , 140(8): 2708-2713, 1988. Abstract.	
231	Giuffre et al. "Monocyte Adhesion to Activated Aortic Endothelium: Role of L-Selectin and Heparan Sulfate Proteoglycans", <i>J. Cell Biol.</i> , 136(4): 945-956, 1997. Abstract.	
232	Shimada et al. "Involvement of Cell Surface Heparin Sulfate in the Binding of Lipoprotein Lipase to Cultured Bovine Endothelial Cells", <i>J. Clinical Invest.</i> , 68(4): 995-1002, 1981. Abstract.	
233	Hayward et al. "Heparinase III Exerts Endothelial and Cardioprotective Effects in Feline Myocardial Ischemia-Reperfusion Injury", <i>J. Pharm. Exp. Ther.</i> , 283(3): 1032-1038, 1997. Abstract.	
234	Yamaguchi et al. "Neutrophil Elastase Inhibitor Reduces Neutrophil Chemoattractant Production After Ischemia-Reperfusion in Rat Liver", <i>Gastroenterology</i> , 112(2): 551-560, 1997. Abstract.	
235	Matgolie et al. "Identification of A Major Heparin-Precipitable Protein in Human Serum and Its Relationship to Cystic Fibrosis", <i>Pediatr. Res.</i> , 16(3): 181-186, 1982. Abstract.	
236	Leong et al. "Different Classes of Proteoglycans Contribute to the Attachment of Borrelia Burgdorferi to Cultured Endothelial and Brain Cells", <i>Infect. Immun.</i> , 66(3): 994-999, 1998. Abstract.	
237	Asagoe et al. "Effect of Heparin on Infection of Cells by Equine Arteritis Virus", <i>J. Vet. Med. Sci.</i> , 59(8): 727-728, 1997. Abstract.	
238	Krusat et al. "Heparin-Dependent Attachment of Respiratory Syncytial Virus (RSV) to Host Cells", <i>Arch. Virol.</i> , 142(6): 1247-1254, 1997. Abstract.	
239	Alvarez-Dominguez et al. "Host Cell Heparan Sulfate Proteoglycans Mediate Attachment and Entry of Listeria Monocytogenes, and the Listerial Surface Protein ActA Is Involved in Heparan Sulfate Receptor Recognition", <i>Infection &amp; Immun.</i> , 65(1): 78-88, 1997. Abstract.	
240	Hagiwara et al. "Inhibitory Effect of Heparin on Red Blood Cell Invasion by Theileria Sergenti Merozoites", <i>Int. J. Parasitol.</i> , 27(5): 535-539, 1997. Abstract.	
241	Shakibaei et al. "Dual Interaction of the Malaria Circumsporozoite Protein With the Low Density Lipoprotein Receptor-Related Protein (LRP) and Heparan Sulfate Proteoglycans", <i>J. Exp. Med.</i> , 184(5): 1699-1711, 1996. Abstract.	
242	Inaba et al. "Effect of Heparin on Infection of Cells by Porcine Reproductive and Respiratory Syndrome Virus", <i>Am. J. Vet. Res.</i> , 58(5): 488-491, 1997. Abstract.	
243	Chen et al. "Dengue Virus Infectivity Depends on Envelope Protein E1 to Target Cell Heparan Sulfate", <i>Nature Medicine</i> , 3(8): 866-871, 1997. Abstract.	
244	Gantt et al. "Cell Adhesion to A Motif Shared by the Malaria Circumsporozoite Protein and Thrombospondin Is Mediated by Its Glycosaminoglycan-Binding Region and Not by CSVTGG", <i>J. Biol. Chem.</i> , 272(31): 19205-19213, 1997. Abstract.	
245	Robert et al. "Chondroitin-4-Sulphate (Proteoglycan), A Receptor for Plasmodium Falciparum-Infected Erythrocyte Adherence on Brain Microvascular Endothelial Cells", <i>Res. Immunol.</i> , 146(6): 383-393, 1995. Abstract.	

246	Herrera et al. "Mediation of Trypanosoma Cruzi Invasion by Heparan Sulfate Receptors on Host Cells and Penetrin Counter-Receptors on the Trypanosomes", Mol. & Biochem. Parasit., 65: 73-83, 1994.	
247	Berkow "The Merck Manual". R. Berkow, M.D., Ed-in-Chief, Merck Research Laboratories: 201, 204, 1308, 177-179, 1016-1017, 194-197, 885, 601, 1997.	
248	Konstan et al. "Patterns of Medical Practice in Cystic Fibrosis: Part II. Use of Therapies", Pediatr. Pulmonol. 28(4): 248-54, Oct. 1999. [Abstract]	
249	Frederiksen et al. "Antibiotic Treatment of Initial Colonization with Pseudomonas Aeruginosa Postpones Chronic Infection and Prevents Deterioration of Pulmonary Function in Cystic Fibrosis", Pediatr. Pulmonol. 23(5): 330-335, May 1997.	
250	Frederiksen et al. "Changing Epidemiology of Pseudomonas Aeruginosa Infection in Danish Cystic Fibrosis Patients (1974-1995)", Pediatr. Pulmonol. 28(3): 159-166, Sep. 1999. [Abstract]	
251	Ramsey et al. "Intermittent Administration of Inhaled Tobramycin in Patients with Cystic Fibrosis. Cystic Fibrosis Inhaled Tobramycin Study Group", New England Journal of Medicine 340(1): 23-30, Jan. 7, 1999. [Abstract]	
252	Tang et al. "Contribution of Specific Pseudomonas Aeruginosa Virulence Factors to Pathogenesis of Pneumonia in a Neonatal Mouse Model of Infection", Infect. Immun. 64(1): 37-43, 1996. Abstract.	
253	Bennett et al. "Effect of Uridine 5'-Triphosphate plus Amiloride on Mucociliary Clearance in Adult Cystic Fibrosis", Am. J. Respir. Crit. Care Med. 153(6 Pt.1): 1796-1801, June 1996. [Abstract]	
254	Armstrong et al. "Lower Airway Inflammation in Infants and Young Children with Cystic Fibrosis", Am. J. Respir. Crit. Care Med. 156(4 Pt.1): 1197-1204, 1997. Abstract.	
255	Naparstek et al. "Activated T Lymphocytes Produce a Matrix-Degrading Heparan Sulphate Endoglycosidase", Nature, 310(5974): 241-244, 1984. Abstract.	
256	Weller "Implications of Early Inflammation and Infection in Cystic Fibrosis: A Review of New and Potential Interventions", Pediatric Pulmonology 24: 143-146, 1997.	
257	Rubin "Emerging Therapies for Cystic Fibrosis Lung Disease", Chest 115: 1120-1126, 1999.	
258	Ducy et al. "The Osteoblast: A Sophisticated Fibroblast under Central Surveillance", Science 289: 1501-1504, 2000.	
259	Reddi "Role of Morphogenetic Proteins in Skeletal Tissue Engineering and Regeneration", Nature Biotechnology 16: 247-252, 1998.	
260	Elkin et al. "Heparanase as Mediator of Angiogenesis: Mode of Action", The FASEB Journal 15: 1661-1663, 2001.	
261	Elkin et al. "Heparanase as Mediator of Angiogenesis: Mode of Action", The FASEB Journal, Published online, May 29, 2001.	
262	Finkel "Potential Target Found for Antimetastasis Drugs", Science 285: 33-34, July 2, 1999.	
263	Webster et al. "FGFR Activation in Skeletal Disorders: Too Much of a Good Thing", TIG 13(5): 178-182, May 1997.	
264	Shimazu et al. "Syndecan-3 and the Control of Chondrocyte Proliferation During Endochondral Ossification", Exp. Cell. Res. 229(1): 126-136, 1996. Abstract.	
265	Blanquaert et al. "CMDBS, Functional Analogs of Sulfate Heparanes, Used as Osseous Cicatrizing Agents", Ann. Endocrinol. (Paris) 55(2): 121-123, 1994. [Abstract]	
266	Blanquaert et al. "Heparan-Like Molecules Induce The Repair Of Skull Defects", Bone, 17(6): 499-506, 1995. Abstract.	
267	Muir et al. "Histomorphometric Analysis of the Effects of Standard Heparin on Trabecular Bone in vivo", Blood 88(4): 1314-1320, August 15, 1996. [Abstract]	
268	Hoffman et al. "Human Bone Morphogenetic Protein 2 Contains a Heparin-Binding Site Which Modifies its Biological Activity", Eur. J. Biochem. 237(1): 295-302, 1996. [Abstract]	
269	Imai et al. "Osteoblast Recruitment and Bone Formation Enhanced by Cell Matrix-Associated Heparin-Binding Growth-Associated Molecule (HB-GAM)", J. Cell. Biol. 143(4): 1113-1128, 1998. [Abstract]	
270	Loredo et al. "Regulation of Glycosaminoglycan Metabolism by Bone Morphogenetic Protein-2 in Equine Cartilage Explant Cultures", Am. J. Vet. Res. 57(4): 554-559, 1996.	
271	Kiberstis et al. "Bone Health in the Balance", Science 289: 1497, 2000.	

272	Service	"Tissue Engineers Build New Bone", Science 289: 1498-1500, 2000.	
273	Stracke et al.	"Autotaxin, Tumor Motility-Stimulating Exophosphodiesterase", Advan. Enzyme Regul. 37: 135-144, 1997. Introduction.	
274	Bost et al.	"Antibodies Against a Peptide Sequence within the HIV Envelope Protein Crossreacts with Human Interleukin-2", Immunol. Invest. 17: 577-586, 1988.	
275	Bendayan	"Possibilities of False Immunocytochemical Results Generated by the Use of Monoclonal Antibodies: The Example of the Anti-Proinsulin Antibody", J. Histochem. Cytochem. 43: 881-886, 1995.	
276	Bar-Ner et al.	"Inhibition of Heparanase-Mediated Degradation of Extracellular Matrix Heparan Sulphate by Non-Anticoagulant Heparin Species", Blood, 70(2): 551-557, 1987.	
277	Savitsky et al.	"Ataxia-Telangiectasia: Structural Diversity of Untranslated Sequences Suggests Complex Post-Transcriptional Regulation of ATM Gene Expression", Nucleic Acids Research, 25(9): 1678-1684, 1997.	
278	Ross	"The Pathogenesis of Atherosclerosis: A Perspective for the 1990s", Nature, 362: 801-809, 1993.	
279	Putnak et al.	"A Putative Cellular Receptor for Dengue Viruses", Nature Medicine, 3(8): 828-829, 1997.	
280	Shieh et al.	"Cell Surface Receptors for Herpes Simplex Virus Are Heparan Sulfate Proteoglycan Proteoglycans", J. Cell. Biol., 116(5): 1273-1281, 1992.	
281	Lider et al.	"A Disaccharide That Inhibits Tumor Necrosis Factor $\alpha$ Is Formed from the Extracellular Matrix by the Enzyme Heparanase", Proc. Natl. Acad. Sci. USA, 92: 5037-5041, 1995.	
282	Spivak-Kroizman et al.	"Heparin-Induced Oligomerization of FGF Molecules Is Responsible For FGF Receptor Dimerization, Activation, and Cell Proliferation", Cell, 79: 1015-1024, 1994.	
283	Vlodavsky et al.	"Endothelial Cell-Derived Basic Fibroblast Growth Factor: Synthesis and Deposition Into Subendothelial Extra-Cellular Matrix", Proc. Natl. Acad. Sci. USA, 84: 2292-2296, 1987.	
284	Vlodavsky et al.	"Involvement of the ExtraCellular Matrix, Heparin Sulfate Proteoglycans, and Heparin Sulfate Degrading Enzymes in Angiogenesis and Metastis", Tumor Angeogenesis, 8: 125-140, 1997.	
285	Bashkin et al.	"Basic Fibroblast Growth Factor Binds to Subendothelial ExtraCellular Matrix and Is Released by Heparitanase and Heparin-Like Molecules", Biochemistry, 28: 1737-1743, 1989.	
286	Nicolson	"Organ Specificity of Tumor Metastis: Role of Preferential Adhesion, Invasion and Growth of Malignant Cells at Specific Secondary Sites", Cancer Met. Rev., 7: 143-188, 1988.	
287	Hillier et al.	"The WashU-Merck EST Project" GenBank Entry N32056, 1996. Claims: 9, 10.	
288	Adams et al.	"Initial Assesment of Human Gene Diversity and Expression Patterns Based Upon 83 Million Nucleotides of cDNA Sequence", Nature, 377(6547): 3-174, 1995. GenBank Entry AA304653, 1997. Claims: 30.	
289	Yagel et al.	"Normal Nonmetastatic Human Trophoblast Cells Share in vitro Invasive Properties of Malignant Cells", J. Cellular Physiology 136: 455-462, 1988.	
290	Kizaki et al.	"Cloning and Localization of Heparanase in Bovine Placenta", Placenta 24: 424-430, 2003.	
291	Dempsey et al.	"Heparanase Expression in Invasive Trophoblasts and Acute Vascular Damage", Glycobiology 10(5): 467-475, 2000. Abstract. P. 470, Col. 1 - P. 471, Col.1; P. 472, Col. 1, § 4 - Col. 2, § 2. Claims: 1-24.	
292	Haimov-Kochman et al.	"Localization of Hepranase in Normal and Pathological Human Placenta", Molecular Human Reproduction 8(6): 566-573, 2002.	
293	Kizaki et al.	"Expression of Heparanase mRNA in Bovine Placenta During Gestation", Reproduction 121: 573-580, 2001. Claims: 1-50.	
294	Edwards et al.	"Some Properties and Applications of Monoclonal Antibodies", Biochem. Journal 200: 1-10, 1981.	
295	Zhou et al.	"HFE Gene Knockout Produces Mouse Model of Hereditary Hemochromatosis", PNAS 95(5): 2492-2497, 1998.	
296	Menezo et al.	"Mouse and Bovine Models for Human IVF", Reproductive BioMedicine Online 2002 4(2): 170-175, 2002. Abstract.	
297	Bean et al.	"Fertilization in vitro Increases Non-Disjunction During Early Cleavage Divisions in a Mouse Model System", Human Reproduction 17(9): 2362-2367, 2002.	

		Abstract.	
	298	Brinster et al. "Restoration of Fertility by Germ Cell Transplantation Requires Effective Recipient Preparation", <i>Biology of Reproduction</i> 69: 412-420, 2003. Abstract.	
	299	Liu et al. "Live Offspring by In Vitro Fertilization of Oocytes from Cryopreserved Primordial Mouse Follicles after Sequential In Vivo Transplantation and In Vitro Maturation", <i>Biology of Reproduction</i> 64: 171-178, 2001. Abstract.	
	300	Kawase et al. "Effect of Partial Incision of the Zona Pellucida by Piezo-Micromanipulator for In Vitro Fertilization Using Frozen-Thawed Mouse Spermatozoa on the Developmental Rate of Embryos Transferred at the 2-Cell Stage", <i>Biology of Reproduction</i> 66: 3810385, 2002. Abstract.	
	301	Pfaff et al. "Cryobiology of Rat Embryos I: Determination of Zygote Membrane Permeability Coefficients for Water and Cryoprotectants, Their Activation Energies, and the Development of Improved Cryopreservation Methods", <i>Biology of Reproduction</i> 63: 1294-1302, 2000. Abstract.	
	302	Yesildaglar et al. "The Mouse as a Model to Study Adhesion Formation Following Endoscopic Surgery: A Preliminary Report", <i>Human Reproduction</i> 14(1): 55-59, 1999. Abstract.	
	303	Ejima et al. "Induction of Apoptosis in Placentas of Pregnant Mice Exposed to Lipopolysaccharides: Possible Involvement of Fas/Fas Ligand System", <i>Biology of Reproduction</i> 62: 178-185, 2000. Abstract.	
	304	Prahalada et al. "Diethylstilbestrol-Induced Cervical and Vaginal Adenosis Using the Neonatal Mouse Model", <i>Biology of Reproduction</i> 38: 935-943, 1988. Abstract.	
	305	Newbold et al. "Exposure to Diethylstilbestrol During Pregnancy Permanently Alters the Ovary and Oviduct", <i>Biology of Reproduction</i> 28: 735-744, 1983. Abstract.	
	306	??? "Mouse Models for Reproductive Biology Research" - <a href="http://www.jax.org/jaxmice">www.jax.org/jaxmice</a> : 1-2, Summer 2002.	
	307	Jin et al. "Molecular Cloning and Expression of Human Heparanase cDNA", <i>Proceedings American Association for Cancer Research Annual Meeting 1992</i> , 33: 57, 1992. Abstract 343. Claims: X: 1-10, 15-18. / Y: 11-14.	
	308	Thuong et al. "Sequence-Specific Recognition and Modification of Double-Helical DNA by Oligonucleotides", <i>Angew.Chem. Int. Ed. Engl.</i> 32: 666-690, 1993.	
	309	Cohen "Oligonucleotide Therapeutics", <i>Trends in Biotechnology</i> 10: 87-91, 1992. Abstract.	
	310	Szczylik et al. "Selective Inhibition of Leukemia Cell Proliferation by BCR-ABL Antisense Oligodeoxynucleotides", <i>Science</i> 253: 562-565, 1991. Abstract.	
	311	Calabretta et al. "Normal and Leukemic Hematopoietic Cell Manifest Differential Sensitivity to Inhibitory Effects of C-myc Antisense Oligodeoxynucleotides: An in vitro Study Relevant to Bone Marrow Purging", <i>Proc. Natl. Acad. Sci. USA</i> 88: 2351-2355, 1991.	
	312	Burch et al. "Oligodeoxynucleotides Antisense to the Interleukin 1 Receptor mRNA Block the Effects of Interleukin 1 in Cultured Murine and Human Fibroblasts and in Mice", <i>J. Clin. Invest.</i> 88: 1190, 1991. Abstract.	
	313	Agrawal "Antisense Oligonucleotides As Antiviral Agents", <i>Trends Biotechnol.</i> , 10(5): 152-158, 1992. Abstract.	
	314	Ngo et al. "The Protein Folding Problem and Tertiary Structure", K.Merz, Jr. and S.Le Grand, Ed Birkhauser Boston: 491-495, 1994.	
	315	Ferber et al. "Pancreatic and Duodenal Homeobox Gene 1 Induces Expression of Insulin Genes in Liver and Ameliorates Streptozotocin-Induced Hyperglycemia", <i>Nature Medicine</i> , 6(5): 568-572, 2000.	
	316	Benjamin et al. "A Plasticity Window for Blood Vessel Remodelling is Defined by Pericyte Coverage of the Preformed Endothelial Network and is Regulated by PDGF-B and VEGF", <i>Development</i> 125: 1591-1598, 1998.	
	317	Vukicevic et al. "Induction of Nephrogenic Mesenchyme by Osteogenic Protein 1 (Bone Morphogenetic Protein 7)", <i>Proc. Natl. Acad. Sci.</i> , 93: 9021-9026, 1996.	
	318	Massague "The TGF-BETA Family of Growth and Differentiation Factors", <i>Cell</i> , 49: 437-438, 1987.	
	319	Pilbeam et al. "Comparison of the Effects of Various Lengths of Synthetic Human Parathyroid Hormone-Related Peptide (hPTHrP) of Malignancy on Bone Resorption and Formation in Organ Culture", <i>Bone</i> , 14: 717-720, 1993.	
	320	Skolnick et al. "From Genes to Protein Structure and Function: Novel Applications of Computational Approaches in the Genomic Era", <i>Trends in Biotech.</i> , 18: 34-39,	

		2000.	
	321	Bork "Powers and Pitfalls in Sequence Analysis: The 70% Hurdle", Genome Res., 10 : 398-400, 2000.	
	322	Doerks et al. "Protein Annotation: Detective Work for Function Prediction", Trends in Genetics, 14(6): 248-250, 1998.	
	323	Smith et al. "The Challenges of Genome Sequence Annotation or "The Devil is in the Details"", Nature Biotechn., 15: 1222-1223, 1997.	
	324	Brenner "Errors in Genome Annotation", Trends in Genetics, 15(4): 132-133, 1999.	
	325	Bork "Go Hunting in Sequence Databases but Watch out for the Traps", Trends in Genetics, 12(10): 425-427, 1996.	
	326	Bowie et al. "Deciphering the Message in Protein Sequences: Tolerance to Amino Acid Substitutions", Science, 247: 1306-1310, 1990.	
	327	??? A Genesq, Accession No. AA17083, 1999.	
	328	Bendig et al. "Humanization of Rodent Monoclonal Antibodies by CDR Grafting", Methods, 8: 83-93, 1995.	
	329	Miao et al. "Cloning, Expression and Purification of Mouse Heparanase", Protein Expression and Purification, 26: 425-431, 2002.	
	330	Coligan et al. "Current Protocols in Immunology", Green Publishing Assoc. 1991.	
	331	Sasisekhara et al. "Cloning and Expression of Heparinase I Gene from Flavobacterium Heparinum", Proc. Natl. Acad. Sci., 90: 3660-3664, 1993.	
	332	Gordon-Cardo et al. "Expression of Basic Fibroblast Growth Factor in Normal Human Tissues", Laboratory Investigation, 63: 832-840, 1990.	
	333	Harper "Harper's Biochemistry", 24th Ed., P. 660-685.	
	334	Boat et al. "Increased Sulfation of Glycoconjugates NY Cultured Nasal Epithelia Cells From Patients With Cystic Fibrosis", Journal of Clinical Invetment, 84(1): 68-72, 1989. Abstract.	
	335	Nossuli et al. "Heparinas III Exerts Endothelial And Cardioprotective Effects In Feline Myocardial Ischemia-Reperfusion Injury", Journal of Pharmaceutical Experimental Therapy, 283(3): 1032-1038, 1997. Abstract.	
	336	Nakajima et al. "Immunochemical Localization of Heparanase in Mouse and Human Melanomas", International Journal of Cancer, 45: 1088-1095, 1990.	
	337	Wands Federal Circular, 1988,	
	338	Fisher CCPA, 1970.	
	339	Carson et al. Mucin And Proteoglycan Functions In Embryo Implantation", BioEssays, 20(7): 577-583, Abstract. P. 580, Col. 2, § 2; P. 582, Col. 1, Fig. 1. Claims: 1-24.	
	340	Clontech Laboratories "RT-PCR Methods and Applications Book 1", Clontech Laboratories, 1st Ed., P.1-15, 26, 40, 1991.	
	341	Novagen "PET System Manual", Novagen, 6th Ed., P.11, 1995.	
	342	Ennis et al. PNAS USA, 87: 2833-2837, 1990.	
	343	Gilat et al. "Molecular Behaviour Adapts to Context: Heparanase Functions As An Extracellular Matrix-Degrading Enzyme Or As A T-Cell Adhesion Molecule, Depending on the Local pH", J. Exp. Med., 181: 1929-1934, 1995.	
	344	Murphy et al. "The Latent Collagenase and Gelatin of Human Polymorphonuclear Neutrophil Leucocytes", Biochem. J., 192: 517-525, 1980.	
	345	Morel et al. "Human Neutrophil Gelitanase Is A Collagenase Type IV", Biochem. & Biophys. Res. Comm., 191: 269-274, 1993.	
	346	Kane "High-Level Expression of Foreign Genes in Mammalian Cells", Genetic Eng., 13: 167-182, 1991.	
	347	Makrides "Strategies for Achieving High-Level Expression of Genes in Escherichia Coli", Microbiolog. Rev., 60: 512-538, 1996.	
	348	Hrlow et al. "Antibodies, A Laboratory Manual", CSH Laboratory Press, 1988.	
	349	Williams et al. "Cytoplasmic Inclusion Bodies in Escherichia Coli Producing Biosynthetic Human Insulin Proteins", Science, 215: 687-689, 1982.	
	350	Chubet et al. "Vectors for Expression and Secretion of FLAG Epitope-Tagged Proteins in Mammalian Cells", BioTechniques, 20: 136-141, 1996.	
	351	Sambrook et al. "Molecular Cloning", CSH Laboratory Press, 1989.	
	352	Romanos "Advances in the Use of Pichia Pasteris for High-Level Gene Expression", Curr. Opin. Biotech., 6: 527-533, 1995.	
	353	Freshney "Animal Cell Culture", P.48-49.	
	355	Wight et al. "Cell Biology of Arterial Proteoglycans", Arteriosclerosis, 9(1): 1-20,	



		1989.	
	356	Kjellen et al. "Proteoglycans: Structures and Interactions", Annu. Rev. Biochem., 60: 443-475, 1991.	
	357	Ruoslahti et al. "Proteoglycans As Modulators of Growth Factor Activities", Cell, 64: 867-869, 1991.	
	358	Vlodavsky et al. "Extracellular Matrix-Bound Growth Factors, Enzymes, and Plasma Proteins", Basic Membranes: Cellular and Molecular Aspects, P. 327-343, 1993.	
	359	Vlodavsky et al. "Expression of Heparanase by Platelets and Circulating Cells of the Immune System: Possible Involvement in Diapedesis and Extra Vasation", Invasion & Metastasis, 12(2): 112-127, 1992. Abstract; Claims: 1-24.	
	360	Vlodavsky et al. "Inhibition of Tumor Metastasis Inhibiting Species of Heparin", Invasion & Metastasis, 14(1-6): 290-302, 1994/95.	
	361	Liotta et al. "Tumor Invasion and the ExtraCellular Matrix", Laboratory Investigation, 49(6): 636-647, 1983.	
	362	Vlodavsky et al. "Lymphoma Cell-Mediated Degradation of Sulfated Proteoglycans in the Subendothelial ExtraCellular Matrix: Relationship to Tumor Cell Metastasis", Cancer Research, 43: 2704-2711, 1983.	
	363	Vlodavsky et al. "Involvement of Heparanase in Tumor Metastasis and Angiogenesis", Israel J. Med. Sci., 24(9-10): 464-470, 1988.	
	364	Parish et al. "Evidence That Sulphated Polysaccharides Inhibit Tumor Metastasis by Blocking Tumor-Cell-Derived Heparanases", Int. J. Cancer, 40: 511-517, 1987.	
	365	Vlodavsky et al. "Morphological Appearance, Growth Behaviour and Migratory Activity of Human Tumor Cells Maintained on Extracellular Matrix Versus Plastic", Cell, 19: 607-616, 1980.	
	366	Vlodavsky et al. "Extracellular Sequestration and Release of Fibroblast Growth Factor: A Regulatory Mechanism?", Trends Biochem. Sci., 16: 268-271, 1991.	
	367	Lider et al. "Suppression of Experimental Autoimmune Diseases and Prolongation of Allograft Survival by Treatment of Animals With Low Doses of Heparin", J. Clin. Invest., 83: 752-756, 1989.	
	368	Thunberg et al. "The Molecular Size of the Antithrombin-Binding Sequence in Heparin", FEBS Letters, 117(1): 203-206, 1980.	
	369	Sudhalter et al. "Importance of Size, Sulfation and Anticoagulant Activity in the Potentiation of Acidic Fibroblast Growth Factor by Heparin", J. Biol. Chem., 254(12): 6892-6897, 1989.	
	371	Inoue et al. " Selective N-Desulfation of Heparin with Dimethyl Sulfoxide containing Water or Methanol", Carbohydrate Research, 46:67-95, 1976.	
	372	Nagasawa et al. "Solvolytic Desulfation of Glycosaminoglycuronan Sulfates with Dimethyl Sulfoxide Containing Water or Methanol; Carbohydrate Research, 58: 47-55, 1977.	
	373	Matia Bar-New et al. Inhibition of Heparanase-Mediated Degradation of Extracellular Matrix Heparin Sulfate by Non-Anticoagulant Heparin Species", Blood, 70(2): 551-557, 1987.	
	374	Gospodarowicz et al. "Stimulation of Corneal Endothelial Cell Proliferation In Vitro by Fibroblast and Epidermal Growth Factors", Exp. Eye Res., 25: 75-89, 1977.	
	375	Haimovits-Friedman et al, "Activation of Platelet Heparitinase by Tumor Cell-Derived Factors", Blood, 78: 789-796, 1991.	
	376	Vlodavsky et al. "Extracellular Matrix-Resident Growth Factors and Enzymes: Possible Involvement in Tumor Metastasis and Angiogenesis", Cancer and Metastasis Rev., 9: 203-226, 1990.	
	377	Regan et al. "Mimicry of Biological Macromolecules by Polyaromatic Anionic Compounds", J. Bioactive and Compatible Polymers, 8:317-337, 1993.	
	378	Benezra et al. " Antiproliferative Activity to Vascular Smooth Muscle Cells and Receptor Binding of Heparain-Mimicking Polyaromatic Anionic Compounds", Arteriosclerosis and Thrombosis, 14(12): 1992-1999, 1993.	
	379	Katz et al. "Antiproliferative Activity to Glomerular Mesangial Cells and Receptor Binding of a Heparain-Mimicking Polyaromatic Anionic Compound", J. Am. Soc. Nephrology, 1688-1697, 1997.	
	380	Miao et al. "Modulation of Fibroblast Growth Factor-2 Receptor Binding Dimerization, Signaling, and Angiogenic Activity by a Synthetic Heparain-Mimicking Polyaromatic Compound", J. Clin. Invest., 99(7): 1565-1575, 1997.	
	381	Benezra et al. "Reversal of Fibroblast Growth Factor-mediated Autocrine Cell Transformation by Aromatic Anionic Compounds", Cancer Research, 52:5656-5662,	

		1992.	
	382	Irimura et al. "Chemically Modified Heparins as Inhibitors of Heparan Sulfate Specific Endo- $\beta$ -glucuronidase (Heparanase) of Metastatic melanoma Cells", <i>Biochemistry</i> , 25:5322-5328, 1986.	
	383	Coombe et al. "Analysis of the Inhibition of Tumor Metastasis by Sulphated Polysaccharides", <i>Int. J. Cancer</i> , 39: 82-88, 1987	
	384	Ornitz et al. "Heparin is Required for Cell-Free Binding of Basic Fibroblast Growth Factor to a Soluble Receptor and for Mitogenesis in Whole Cells", <i>Molecular and Cellular Biology</i> , 12:240-247, 1992.	
	385	Yayon et al. "Cell Surface, Heparin-Like Molecules Are Required For Binding of Basic Fibroblast Growth Factor to Its High Affinity Receptor", <i>Cell</i> , 64: 841-848, 1991.	
	386	Aviezer et al. "Differential Structural Requirements of Heparin and Heparan Sulfate Proteoglycans that Promote Binding of Basic Fibroblast Growth Factor to its Receptor", <i>J. Bio. Chem.</i> , 269(1):114-121, 1994.	
	387	Bartlett et al. "Comparative Analysis of the Ability of Leucocytes, Endothelial Cells, and Platelets to Degrade the Subendothelial Basement Membrane: Evidence for Cytokine Dependence and Detection of a Novel Sulfatase", <i>Immunology and Cell Biol.</i> , 73: 113-124, 1995.	
	388	Nakajima et al. "A Solid-Phase Substrate of Heparanase: Its Application to Assay of Human Melanoma for Heparan Sulfate Degradative Activity", <i>Analytical Biochemistry</i> , 157: 162-171, 1986.	
	389	Oosta et al. "Purification and Properties of Human Platelets Heparitinase", <i>J. Biol. Chem.</i> , 257(19): 11249-11255, 1982.	
	390	Sewell et al. "Human Mononuclear Cells Contain an Endoglycosidase Specific for Heparan Sulfate Glycosaminoglycan Demonstrable with the Use of a Specific Solid-Phase Metabolically Radiolabelled Substrate", <i>Biochem J.</i> , 264: 777-783, 1989	
	391	Freeman et al. "A Rapid Quantitative Assay for the Detection of Mammalian Heparanase Activity", <i>Biochem J.</i> , 325:229-237, 1997.	
	392	Mullings et al. "New Reducing Sugar Assay for the Study of Cellulases", <i>Enzyme Microb. Technol.</i> , 6:491-496, 1984.	
	393	Taylor et al. "A Colorimetric Method for the Quantitation of Uronic Acids and a Specific Assay for Galacturonic Acid", <i>Analytical Biochemistry</i> , 201: 190-196, 1992.	
	394	Linhardt "Capillary Electrophoresis of Oligosaccharides", <i>Methods in Enzymology</i> , 230:265-280, 1994.	
	395	Basu et al. "Analysis of Glycosphingolipids by Fluorophore-Assisted Carbohydrate Electrophoresis Using Ceramide Glycanase from <i>Mercenaria mercenaria</i> ", <i>Analytical Biochemistry</i> , 222:270-274, 1994.	
	396	Jackson "The Use of Polyacrylamide-gel Electrophoresis for the High-Resolution of Separation of Reducing Saccharides Labelled with the Fluorophore 8-aminonaphthalene-1,3,6-trisulphonic Acid", <i>Biochem J.</i> , 270: 705-713, 1990.	
	397	Coquet et al. "Applications of a Post-Column Fluorogenic Reaction in Liquid Chromatography for the Determination of Glucose and Fructose in Biological Matrices", <i>Analytica Chimica Acta</i> , 252: 173-179, 1991.	
	398	De Vouge et al. "Immunoselection of GRP94/Endoplasmic From A KNRK Cell-Specific $\lambda$ gt11 Library Using Antibodies Directed Against A Putative Heparanase Amino-Terminal Peptide", <i>Int. J. Cancer</i> , 56:286-294, 1994. Claims: 1, 3, 5-7, 15-17.	
	399	Zsolnai et al. "Directional Immobilization of Heparin onto Nonporous Surface of Polystyrene Microplates", <i>Biotechniques</i> , 23(3): 382-385, 1997.	
	400	Bellott et al. "Closing the Loop in Combinatorial Chemistry", <i>European Pharmaceutical Contracotr</i> , 1997.	
	401	Goldberg et al. "An Improved Method for Determining Proteoglycans Synthesized by Chondrocytes in Culture", <i>Live Tissue Research</i> , 24: 265-275, 1990.	
	402	Yen et al. "Potentialities of a new Class of Anticlotting and Antihemorrhagic Polymers", <i>J. Macromol. Sci., Chem.</i> , 4(3), pp. 693-714 in <i>Chem. Abst. AN</i> , 1970 418456	
	403	Mes et al. "Use of Triphenyltetrazolium Chloride for the Quantative Analysis of Sugars and Sugar Derivatives Reported in Glycoproteins", <i>J. Chromatogr.</i> , 43(\$), pages 480-486, 1969.	
	404	Mes et al. "Relative Sensitivity of Various Reagents for the Detection and Differentiation of Sugars and Sugar Derivatives in Glycoproteins", <i>J. Chromatogr.</i> , 38(1): 120-125, 1968.	

405	Vlodavsky et al. "Morphological Appearance, Growth Behaviour and Migratory Activity of Human Tumor Cells Maintained on Extracellular Matrix Versus Plastic", <i>Cell</i> , 19: 607-616, 1980.
406	Burgess et al. "The Heparin-Binding (Fibroblast) Growth Factor of Proteins", <i>Annu. Rev. Biochem.</i> , 58: 575-606, 1989.
407	Campbell et al. "Heparan Sulfate-Degrading Enzymes Induce Modulation of Smooth Muscle Phenotype", <i>Experimental Cell Research</i> , 20: 156-167, 1992.
408	Eisenberg et al. "Lipoprotein Lipase Enhances Binding of Lipoproteins to Heparan Sulfate on Cell Surface and Extracellular Matrix", <i>J. Clin. Invest.</i> , 90: 2013-2021, 1992.
409	Folkman et al. "A Heparin-Binding Angiogenic Protein - Basic Fibroblast Growth Factor - Is Stored Within Basement Membrane", <i>Am. J. Pathology</i> , 130(2): 393-400, 1988.
410	Folkman et al. "Angiogenic Factors", <i>Science</i> , 235: 442-447, 1987.
412	Matzner et al. "Degradation of Heparan Sulfate in the Subendothelial Extracellular Matrix by a Readily Released Heparanase from Human Neutrophils", <i>J. Clin. Invest.</i> 76(4): 1306-1313, Oct. 1985.
413	Mollinedo et al. "Major Co-Localization of the Extracellular-Matrix Degradative Enzymes Heparanase and Gelatinase in Tertiary Granules of Human Neutrophils", <i>Biochem. J.</i> , 327: 917-923, 1997.
414	Narindrasorasak et al. "High Affinity Interactions Between the Alzheimer's $\beta$ -Amyloid Precursor Proteins and the Basement Membrane Form of Heparan Sulfate Proteoglycan", <i>J. Biol. Chem.</i> 266(20): 12878-12883, 1991.
415	Ornitz et al. "FGF Binding and FGF Receptor Activation by Synthetic Heparin-Derived Di- and Trisaccharides", <i>Science</i> , 268: 432-436, 1995.
416	Rapraeger et al. "Requirement of Heparan Sulfate For bFGF-Mediated Fibroblast Growth and Myoblast Differentiation", <i>Science</i> , 252: 1705-1709, 1991.
417	Zhong-Sheng et al. "Role of Heparan Sulfate Proteoglycans in the Binding and Uptake of Apolipoprotein E-Enriched Remnant Lipoproteins by Cultured Cells", <i>J. Biol. Chem.</i> , 268(14): 10160-10167, 1993.
418	Hudson "Recombinant Antibody Fragment", <i>Curr. Opin. Biotech.</i> , 4:395-402, 1998.
419	Schoepe et al. "Neutralization of Hemolytic and Mouse Lethal Activities of C. Perfringens Alpha-Toxin Need Simultaneous Blockage of Two Epitopes by Monoclonal Antibodies", <i>Microbiol. Pathogenesis</i> , 23: 1-10, 1997.
420	Chiba et al. "Generation of Neutralizing Antibody to the Reverse Transcriptase of Human Immunodeficiency Virus Type 1 by Immunizing of Mice with an Infectious Vaccinia Virus Recombinant", <i>J. Immunological Methods</i> , 207:53-60, 1997.
421	Wong "Monoclonal Antibodies: Therapeutic Applications Grow in Promise and Number", <i>Genetic Engineering News</i> : 23-49, 1998.
422	Sherman-Gold "Monoclonal Antibodies: The Evolution from '80s Magic Bullets to Mature, Mainstream Applications as Clinical Therapeutics", <i>Genetic Engineering News</i> : 4, 35, 1997.
423	Danheiser "Rituxin Leads Line of Hopeful Mab Therapies, yet FDA still has Bulk Manufacture Concerns", <i>Genetic Engineering News</i> : 1,6,33,38, 1997.
424	Rader et al. "A Phage Display Approach for Rapid Antibody Humanization: Designed Combinatorial V Gene Libraries", <i>Proc. Natl. Acad. Sci.</i> , 95: 8910-8915, 1998.
425	Mateo et al. "Humanization of a Mouse Monoclonal Antibody that Blocks the Epidermal Growth Factor Receptor: Recovery Antagonistic Activity", <i>Immunotechnology</i> , 3: 71-81, 1997.
426	Thunberg et al. "The Molecular Size of the Antithrombin-Binding Sequence in Heparin", <i>FEBS Lett.</i> , 117: 203-206, 1980
427	Nakajima et al. "Heparanases and Tumor Metastasis", <i>J. Cell Biochemistry</i> , 36(2): 157-167, 1988.
428	Ngo et al. "Computational Complexity, Protein Structure Prediction, and the Levinthal Paradox", in <i>The Protein Folding Problem and Tertiary Structure Prediction</i> , 1994, Merz et al., (ed.), Birkhauser, Boston, MA, pp.433 and 492-495.
429	Colman "Effects of amino Acid Sequence Changes on Antibody-antigen Interactions", in <i>Research in Immunology</i> , 1994; 145(1): 33-86.
430	Abaza et al. "Effects of Amino Acid Substitutions Outside an Antigenic Site on Protein Binding to Monoclonal Antibodies of Predetermined Specificity Obtained by Peptide Immunization: Demonstration with Region 94-100 (Antigenic Site 3) of

		Myoglobin", in Journal of Protein Chemistry, 11(5): 433-444, 1992.	
431		Lederman et al. "A Single amino Acid Substitution in a common African allele of the CD4 Molecule Ablates Binding of the Monoclonal antibody, OKT4", Molecular Immunology 28: 1171-1181, 1991)	
432		Li et al. "β-Endorphin Omission Analogs: Dissociation of Immunoreactivity from other Biological Activities", PNAS 77: 3211-3214, 1980)	
433		Marchetti et al. "Neurotrophin Stimulation of Human Melanoma Cell Invasion: Selected Enhancement of Heparanase Activity and Heparanase Degradation of Specific Heparan Sulfate Subpopulations", Cancer Research, 56: 2856-2863, 1996. also in: Advances in Enzyme Regulation, 37: 111-134, 1997.	
434		Kosir et al. "Human Prostate Carcinoma Cells Produce Extracellular Heparanase", J. Surg. Res., 67: 98-105, 1997.	
435		Koehler et al. "Continuous Cultures of Fused Cells Secreting Antibody of Predefined Specificity", Nature 256: 495-497, 1975.	
438		Kussie et al. "Cloning and Functional Expression of a Human Heparanase Gene", Biochemical and Biophysical Research Communication 261(1): 183-187, 1999.	
439		Walch et al. "Correlation of Overexpression of the Low-Affinity p75 Neurotrophin Receptor with Augmented Invasion and Heparanase Production in Human Malignant Melanoma Cells", Int. J. Cancer 82: 112-120, 1999.	
440		Freeman et al. "Evidence that Platelet and Tumour Heparanases are Similar Enzymes", Biochem J. 342: 361-368, 1999.	
441		Ernst et al. "Enzymatic Degradation of Glycosaminoglycans", Crit. Rev. in Biochemistry and Molecular Biology, 30(3): 387-444, 1995.	
442		Zhou et al. "A 182 bp Fragment of the Mouse proα1(I) Collagen Gene is Sufficient to Direct Chondrocyte Expression in Transgenic Mice", J. Cell Science 108: 3677-3684, 1995.	
443		Hormuzdi et al. "A Gene-Targeting Approach Identifies A Function for the First Intron in Expression of the α1(I) Collagen Gene.", Mol Cell Biol., 18(6): 3368-3375, 1998. Abstract.	
444		Chow et al. "Development of an Epithelium-Specific Expression Cassette with Human DNA Regulatory Elements for Transgene Expression in Lung Airways", Proc. Natl. Acad. Sci., 94:14695-14700, 1997.	
445		Ye et al. "Targeted Gene Correction: A New Strategy for Molecular Medicine", Molecular Medicine Today: 431-437, 1998.	
446		Lai et al. "Homologous Recombination Based Gene Therapy", Exp. Nephrol, 7(1):11-14, 1999. Abstract.	
447		Yazaki et al. "The Structure and Expression of the FGF Receptor-1 mRNA Isoforms in Rat Tissues", Biochimica et Biophysica Acta, 1172: 37-42, 1993.	
448		Le Fur et al. "Selective Increase in Specific Alternative Splice Variants of Tyrosinase in Murine Melanomas: A Projected Basis for Immunotherapy", Proc. natl. Acad. Sci., 94: 5332-5337, 1997.	
449		Gewirtz et al. "Nucleic Acid Therapeutics: State of the Art and Future Prospects", Blood 92(3): 712-736, 1998.	
450		Shastri "Gene Disruption in Mice: Models of Development and Disease", Molecular and Cellular Biochemistry, 181: 163-179, 1998.	
451		Carpentier et al. "DNA Vaccination with HuD Inhibits Growth of a Neuroblastoma in Mice", Clinical Cancer Research, 4: 2819-2824. 1998.	
452		Lai et al. "DNA Vaccines" Critical Reviews in Immunology 18: 449-484, 1998.	
453		Kurachi et al. "Role of Intron I in Expression of the Human Factor IX Gene", Journal of Biological Chemistry 270(10): 5276-5281, 1995.	
454		Shekhar et al. "Correlation of Differences in Modulation of ras Expression with Metastatic Competence of Mouse Mammary Tumour Subpopulations", Invasion Metastasis, 14: 27-37, 1994/5.	

Signature		Considered	
-----------	--	------------	--

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount

of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS.  
SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

*If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.*